

### ABSTRACT

This patent describes a novel method of detecting genetic interactions in yeast. This  
5 method can also be used to screen for function of biological effectors on yeast. The method  
encompasses crossing yeast strains with genetic alterations to acquire double mutants. The  
phenotypes of these double mutants are then checked to detect genetic interactions between the  
double mutants. This method can be used to assign function to yeast genes and their viral,  
prokaryotic, and eukaryotic homologs, and aptamers. It can also be used to study yeast two  
10 hybrid interactions and to find genes that regulate certain yeast promoters.

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